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Asymmetric federalism and economic voting

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Although federal arrangements adopt a multiplicity of forms across and within federations, this paper suggests that some models of power division are better than others at enhancing clarity of responsibility and electoral accountability. This conclusion is the result of exploring responsibility attribution and economic voting in a state where decentralisation arrangements vary across regions: the Spanish State of Autonomies. Using electoral surveys and aggregated economic data for the 1982-2012 period, the empirical analysis shows that regional economic voting is most pronounced in regions where decentralisation design concentrated authority and resources at one level of government, whereas it is inexistent in regions where devolution followed a more intertwined model of power distribution. The implication of the empirical findings is that the specific design of intergovernmental arrangements is crucial to make electoral accountability work in federations.

Keywords: accountability, elections, federalism, clarity of responsibility, responsibility attribution.

One of the most celebrated promises of federalism is the democratic one. Classical political theorists as well as modern welfare economists have praised decentralized governance as an institutional solution to facilitate democracy and enhance the control of governments. Political scientists have stressed the accommodating virtues of divided sovereignty in large, heterogeneous societies with strong ethnic or linguistic communities, whereas welfare economists have emphasized the qualities of the vertical fragmentation of powers to promote intergovernmental competition and bring policies more into line with citizens' preferences. While anchored in different mechanisms, both

views associate decentralized governance with increased responsiveness and accountability.

Although the enthusiasm for federalism has shown up time and again strong resilience to the (less optimistic) realities of federations (Beramendi, 2007), the literature in the area illustrates growing recognition of the perils associated with decentralized governance such as increasing corruption, ethnic conflict, inefficiency or fiscal indiscipline (Beramendi & León, 2015). Challenges to the attraction of federalism have also affected its democratic promises. Some scholars have taken the accountability advantages of federalism to task by showing that the intertwined division of governmental authority in federations diffuses responsibility attribution (Cutler, 2004, 2008; Rudolph, 2003a, b) and that the relationship between economic conditions and voting is weaker where multilevel governance is more prominent (Anderson, 2006).

In bridging the gap between the theoretical promises of federalism and the actual operation of federations, we still lack a good understanding about how different forms of decentralized governance affect democratic accountability. As any other institutional form of power division, the vertical division of powers in multilevel systems may complicate responsibility attribution. Yet federal arrangements adopt a multiplicity of forms across and within federations, and there is still much to be learned about whether, among the existing institutional variety,¹ there is a particular federal design that enhances clarity of responsibility and, in turn, citizens' capacity to hold governments to account.

This paper tackles this task by exploring responsibility attribution and accountability in an asymmetric federal state, the Spanish State of Autonomies. Devolution in Spain is

asymmetric on both its revenue and expenditure sides, which allows testing whether cross-regional variation in decentralisation arrangements is associated with variation in clarity of responsibility and, in turn, to variation in economic voting. Using electoral surveys and aggregated economic data, we find evidence that economic voting during the 1982-2012 period is strongest in regions that followed a type of decentralisation that concentrated authority and resources at one level of government (layer-cake type). On the contrary, in regions where decentralisation adopted a more intertwined (marble-cake) arrangement regional incumbents' electoral fate is weakly associated with economic conditions.

Attributions of responsibility, clarity of responsibility and economic voting

The clear-cut distribution of powers between levels of governments of the federation envisaged in *The Federalist Papers* by Hamilton, Madison and Jay is a far cry from the highly intertwined division of governmental authority in modern federal states.

Certainly, the most defining feature of the distribution of policy and fiscal authority between the centre and the subnational units in multilevel systems is the predominance of shared authority², rather than a “watertight compartment” form of power division (Rodden, 2006:41).

The predominance of intertwined distribution of powers between levels of government in multilevel systems may have profound implications for representative democracy. A complex institutional context may pose a challenge on the operation of democratic accountability by blurring citizens' capacity to distinguish who is responsible for what. In the classic model of electoral accountability, voters use elections to reward or punish

politicians on the basis of their past performance (Fiorina, 1981). However, elections can only work as an effective retrospective mechanism to control governments insofar as there is clarity of responsibility (Key, 1966; Ferejohn, 1986; Royed et al., 2000; Powell, 2000;). If citizens cannot clearly distinguish spheres of authority across levels of government, voters' electoral punishments or rewards may be barely connected to incumbents' past performance, which takes the whole classic reward-punishment model of electoral accountability to task. Politicians may engage in blame-avoidance to excuse or justify bad policy outcomes (Weaver, 1986; McGraw, 1990; McGraw et al., 1993), which can contribute to blur responsibility attribution and distort citizens' perceptions on government performance (Ansolabehere et al., 2012; Bartels, 2002; Duch & Stevenson, 2008).

There is a large body of literature that shows that complex institutional contexts complicate responsibility attribution and, in turn, make it difficult for voters to hold governments to account. Different forms of horizontal division of powers, such as coalition governments or bicameral opposition, are associated with low levels of clarity, which attenuates the economy-voting relationship (Anderson, 2000; Hobolt & Tilley, 2014a; Lowry et al., 1998; Nadeau et al., 2002; Powell & Whitten, 1993; Royed et al., 2000). More recent contributions have shown that the institutional conditions that weaken the reward-punishment model for economic outcomes may also attenuate voting on issues other than the economy, such as health care (Hobolt et al., 2013) or European integration (de Vries et al., 2011). The literature also provides extensive evidence at the individual level on the formation of responsibility attribution and its impact on economic judgements. A key finding in this area is the strong role played by partisanship in acting as a "perceptual screen" that affects responsibility attribution

(Hobolt & Tilley, 2014b; Malhotra & Kuo, 2008; Gomez & Wilson, 2001; Tilley & Hobolt, 2011) and moderates performance voting (Rudolph, 2003a, b,; Marsh & Tilley, 2009).

Although the formation of responsibility attribution and its impact on voting decisions has also been studied in federal or decentralised contexts (Arceneaux, 2006; Cutler, 2004, 2008, 2012; Rudolph, 2003a, b; Johns, 2011; León, 2010)³, there is still much to be learned about how multilevel governance affects clarity of responsibility and economic voting⁴. Federations are a far cry from being homogeneous and the nature and extent of fiscal and expenditure arrangements is virtually as varied as the number of federal entities. This calls for a consideration of federal institutions beyond a mere dichotomous variable, a theoretical and empirical challenge that the comparative literature on responsibility attribution and economic voting has so far barely addressed. While there is evidence of weaker economic voting in countries where multilevel governance is more prominent (Anderson, 2006), but with scant empirical evidence in the area, we still ignore whether among the institutional variety that characterises federal arrangements, there is a particular design that better serves the conditions that hold politicians accountable.

This paper helps to advance previous research by studying whether differences in the design of decentralisation agreements results in variation in the strength of the relationship between economic conditions and voting. We do so by exploring clarity of responsibility and economic voting in an asymmetric devolved country, the Spanish State of Autonomies. Asymmetries allow us to analyse whether cross-regional variation in decentralisation agreements have an impact on clarity of responsibility and, in turn,

on the operation of economic voting, holding other institutional variables constant. Our main argument is that the economy-voting relationship will be stronger where decentralisation followed a “layer-cake” model and is characterized by concentrating authority and resources at one level of government. We expect weaker economic voting where decentralisation agreements are of a “marble-cake” type, involving higher levels of shared authority between levels of government.

Our characterisation of the layer-cake federal design departs from a notion of “dual federalism” where the distribution of powers across governments is clearly distinct and where voters are able to make those distinctions correctly. Such a view presumes that voters are informed and that they hold subnational politicians accountable for distinctly local responsibilities, an assumption that contradicts the more intertwined forms of power division that predominate in federal systems (Rodden & Wibbels, 2011; Rodden, 2006:41). In our conceptualisation of Elazar’s bakery analogy the crucial difference between layer and marble-cake systems is that in the former there is a level of government that clearly predominates over the other. In layer-type systems decentralisation design (the allocation of powers between national and subnational governments) is such that citizens perceive there is a level of government responsible for *the bulk* of decisions over revenues and expenditures. The informational stakes for voters are consequently lower. We do not expect individuals in layer-cake systems to hold a detailed map of the distribution of responsibilities across levels of government when assigning responsibility attributions and deciding their vote. Instead, what accounts for higher clarity of responsibility in layer-cake systems versus the marble-cake ones is that in the former voters can more easily identify the *predominant* level of administration, which makes it easier for them to assign responsibilities and their vote.

In summary, in our model decentralisation design (layer vs. marble) has an impact upon clarity of responsibility, which in turn affects the nature of economic voting. The causal relationship is as follows:

Decentralisation design (layer vs. marble) → clarity of responsibility → economic voting

The metaphor of layer-cake vs. marble cake federalism has been previously addressed to account for regional patterns of responsibility attribution in Spain (León, 2010, 2012). However, this paper contributes to advance previous research in two ways. First, we analyse the relationship between decentralisation arrangements and responsibility attribution with a broader and more recent set of public opinion data, confirming previous empirical results. Second, and most important, our analysis does not end in explaining cross-regional variation in responsibility attribution. We bring the empirical and theoretical insights one step further by exploring the relationship between regional patterns of responsibility attribution and regional economic voting.

This article also contributes to a cumulative body of theoretical and empirical research on the consequences of federalism. There is evidence showing that the diversity of federal arrangements is important to understand why some federal countries get stuck in fiscal disaster while others do not (Rodden, 2006) as well as for the stability of the federation (Filippov et al., 2004). Our paper complements this literature by connecting the diversity of decentralisation arrangements to the differences in the operation of electoral accountability.

Finally, our analysis of the Spanish case goes beyond a purely local study because the empirical findings have significant implications upon the essential qualities of asymmetric devolution. Whereas asymmetric federalism has been mainly praised in the literature for its “holding the state together” properties (Stepan, 1999), our paper helps to advance this research by exploring its implications upon electoral accountability. The analysis is of particular relevance to understand the potential accountability implications of future constitutional reform in the United Kingdom. Our empirical findings suggest that the specific way in which further devolution to Scotland, as well as to England and Wales, is designed will be crucial in shaping electoral accountability in those regions after the reform. Finally, the theoretical analysis of the paper could also be applied to explore variation in clarity of responsibility and economic voting in other asymmetric states such as Canada, Italy or Belgium.

Decentralisation, clarity of responsibility and economic voting in Spain

The 1978 Spanish Constitution established different procedural mechanism for the regional governments to be formed, each one involving different levels of authority over revenues and expenditures (Aja, 2003; Ruiz Almendral, 2003). The marble vs. layer-cake division among Spanish regions can be drawn according to the type of decentralisation path towards autonomy, which categorizes regions in three different groups.

The first group of regions is formed by the Basque Country and Navarra, which accessed to autonomy with the most extensive transfer of powers (see Table 1). We will define them as the “fast-track” group (León, 2012, 2010). These regions were

transferred broad executive and legislative powers over many policy areas such as health care, education and social policy. In addition, they were granted a regional system of financing that provided full regional autonomy over major taxes. The specific decentralisation arrangements in fast-track regions resulted in a sort of *layer-cake* model of federalism. Regional governments in the Basque Country and Navarra gained authority over the lion's share of public policies and tax income, whereas the central government only kept powers over competencies such as international relations or defence. This model enhanced clarity of responsibility because it was the regional level of government that concentrated most powers and authority, particularly in those policy areas that involved higher levels of interaction with citizens (taxation, health care or education).

A second group of regions, that we define as “mixed-track”, accessed autonomy with a more intertwined distribution of powers than the rest. Regional governments were endowed with high powers over expenditures (policy areas such as health care or education) but revenue authority stayed in the hands of the central government, as regional governments' expenditure decisions remained ultimately dependent upon funding from the central government. As a result, decentralisation arrangements in mixed-track regions followed more closely a marble-cake type, as most important competences were divided between the regional and the central level of government.

Finally, the third group of regions are the “slow-track” group, which accessed autonomy with very limited powers over expenditures and revenues. Policy areas such as health care, education and social policies remained in the hands of the central government, whereas regional financing mostly depended on transfers from the central government.

The specific decentralisation arrangements in slow-track regions resulted in a *layer-cake* decentralisation design, as most important competences over revenues and expenditures were concentrated at the central level. This model enhanced clarity of responsibility because there was one level of government – the central administration – that concentrated most important competences. Slow-track regions were gradually endowed with new competences on expenditure powers and at present, there is no significant variation in expenditure powers across the 17 regions.

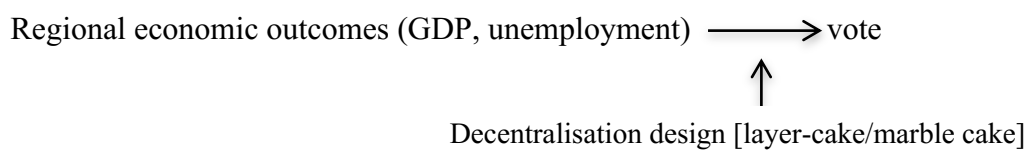
[TABLE 1 ABOUT HERE]

Our general argument contends that decentralisation design will have an impact upon economic voting through clarity of responsibility. In Figure 1 we provide empirical evidence on the relationship between decentralisation design and responsibility attribution. Figure 1 exhibits data⁵ on individuals' capacity to identify the main responsible level of government for different spending areas (old-age pensions, illness/disability benefits, unemployment benefits, health care and education) and income tax.⁶ Results show that clarity of responsibility is significantly higher (illustrated by the confidence intervals) in regions where the decentralisation path followed a layer-cake model. More specifically, the comparative informational advantage of citizens in layer-cake regions is that they are very good at ascribing responsibility correctly for those policies that belong to the most predominant level of government. Citizens from fast-track regions are better at identifying the correct administration for regional spending and taxing competences (right and bottom graph in Figure 1), whereas clarity of responsibility in the slow-track group is highest in policy areas that have been always in the hands of the central administration (left graph in

Figure 1). On the contrary, individuals from mixed-track regions do not stand out in attributing responsibility, neither for regional policy areas nor for central government competences. These results support previous empirical evidence on cross-regional differences in clarity of responsibility using data from 1998 (León, 2010).

[FIGURE 1 ABOUT HERE]

We expect voter's perceptions on responsibility attribution to moderate the relationship between the state of the economy and support for the regional incumbent. In so far as clarity of responsibility is necessary for retrospective voting, we predict economic voting to be more pronounced in regions where voters can clearly identify a predominant level of government (layer-cake regions) than in regions where responsibility attribution is more blurred. In other words, decentralisation design will moderate the relationship between economic conditions and voting. The causal relationship can be represented as follows:



Decentralisation in slow-track regions made the national administration the principal level of government. Consequently, we expect citizens in these regions to regard the state of the regional economy as the result of economic decisions taken at central level, and not so much as an indicator of the regional incumbent's performance. Put it differently, we hypothesize that regional economic voting in slow-track regions will be

contaminated by national electoral dynamics, and therefore it will not be “genuine regional economic voting” but rather “coattail economic voting” (Bosch, 2016). If this is so, we expect vertical lines of accountability to operate through party links: affiliated regional governments (ruled by the party that controls the national executive) will be punished when poor economic outcomes are stake and rewarded when economic outcomes are good. In slow-track non-affiliated regions economic outputs will not show any significant impact upon incumbents’ electoral support.

The hypotheses can be summarised as follows:

H1: In layer-cake regions support for regional incumbent will be more strongly associated with regional economic outputs than in marble-cake regions

H2: In slow-track regions support for the regional incumbent will be determined by national coattails, so in affiliated regions the regional incumbent will be punished for bad regional economic conditions and rewarded for good regional economic outputs.

Data and variables

Our hypotheses are tested using a dataset that contains all available pre-election surveys of the Spanish regional elections held from 1982 to 2012. The dataset includes information on 121 elections from the seventeen Spanish regions, but we lose twelve elections because they lacked some relevant variables.⁷ All surveys belong to the Centre for Sociological Research (CIS) catalogue and follow a similar survey methodology.⁸

Dependent variable: the dependent variable in our model is support for the regional incumbent and it is coded as 1 when respondents intend to vote for the regional Prime Minister's party and 0 when they intend to vote for any other party.⁹ The existing literature on coalition governments shows that not all members of the coalition are held equally responsible for government outcomes. The assignment of responsibility within the coalition depends on the size of the party (Anderson, 2000), the number of portfolios the party holds (Duch & Stevenson, 2008), the party who is perceived as the agenda setter (Duch et al., 2015) or the level of centralisation/ compartmentalisation of the cabinet (Falcó-Gimeno, 2012). Hence, the way in which voters distribute rewards and punishments among the different members of the coalition depends on the political context. Yet, it is generally the Prime Minister's party which is the one that tends to be more affected by economic performance (Urquizu Sancho, 2011). The conclusions of this paper do not substantially change if we code the dependent variable as 1 if respondents support *any* of the political parties that form part of the coalition government.

Independent variables: We operationalise accountability as the electoral impact of economic outcomes upon support for the regional incumbent. So the stronger the impact, the stronger the electoral accountability. We rely on two objective measures that capture the evolution of the economy at the regional level: unemployment growth and GDP growth. Both variables are measured as the mean annual change (in percentage points) during the past mandate (four years in most of the cases). The data comes from the official statistics of the *National Statistics Institute* (INE) economic series.

The variable *decentralisation design* classifies the different regions in Spain in three categories (see Table 1): first, the *slow-track regions*, which accessed autonomy with low levels of expenditure and revenue authority (layer-cake type); second, the *mixed-*

track regions, which accessed autonomy with an intertwined form of power (marble-cake type) division; and, third, the *fast-track regions*, which were endowed with high levels of expenditure as well as revenue powers (layer-cake type). The most important independent variable in the econometric model is the interaction between *decentralisation design* and the two variables that measure regional economic outputs, namely regional unemployment and regional GDP. The interaction captures the moderating effect of decentralisation design upon the relationship between economic outputs and incumbent support. According to our first hypothesis, we expect the interaction coefficient to be highest in fast-track and slow-track regions than in mixed-track regions.

Models include additional individual- and contextual-level control variables. At the individual level, we control for respondents' education, sex, age, employment status, ideology (left-right self-placement) and political knowledge. This latter variable is an index that measures voters' knowledge of the three main party leaders of the region and it ranges from 0 (the respondent affirms that he doesn't know any candidate) to 3 (the respondent affirms that he knows all three candidates).

At the aggregate level, we introduce the *Effective Number of Parties* (ENP).¹⁰ We expect support for the regional incumbent to be lower as the level of fragmentation of the party system increases. An important contextual-level control is the *type of government*, coded as 0 for majoritarian single party governments (base category), 1 for minority single party governments and 2 for majoritarian and minority coalitions.¹¹ It is important to control for the type of regional government because 34 per cent of the cases included in our dataset are coalition governments. As it has been consistently corroborated in the literature since the publication of the path-breaking work of Powell and Whitten (1993), coalition governments blur clarity of responsibility, as it becomes

more difficult for citizens to determine who is accountable for government performance (Lewis-Beck, 1990) and weaker economic voting is expected.

We also control for the number of days between General and Regional elections. The proximity between first- (General) and second-order (Regional) elections allows the consideration of contamination effects between the national and the regional electoral arenas. Finally, we also introduce in our models the variable “Non-affiliated”, which takes the value 1 when regional and central governments are ruled by different parties, and 0 otherwise. We use this variable to control for the second-order nature of regional elections and the correlation that may exist between regional electoral results in affiliated regions as a result of the impact of national coattails (Lago Peñas & Lago Peñas, 2011; León, 2014).

Method

Since our models combine individual and contextual-level variables, we use multilevel regression techniques. In particular, we estimate a logistic random intercept model, where the intercept is composed of an average value for the groups (γ_{00}) and a random value to account for the variation across groups (U_{0j}). Thus, our model specification is the following:

$$\log \frac{(\pi_{ij})}{(1 - \pi_{ij})} = \gamma_{00} + \gamma_{1j}x_{1j} + \beta_{1j}x_{1j} + R_{ij} + U_{ij}$$

where the random effects are R_{ij} (the unexplained individual-level residual) and U_{ij} (the group-level one). B_{ij} is a fixed effect of the individual-level variables and γ_{1j} are group-

level variables that explain variation in the intercept. In our models we have 109 observations (regional elections) at the contextual level and 119688 individuals.

Results

In Models A1 and B1 of Table 2 we estimate the effect of the economy on incumbent voting. These initial models do not take into consideration the conditional effects generated by the type of regional decentralisation or by the party affiliation of the regional incumbent. The estimates of these two initial models show that incumbents' electoral success is indeed influenced by the evolution of the regional economy. The coefficients associated with unemployment and GDP growth variables show the expected sign and they are statistically significant at the $p < 0.01$ level.

In order to have a more intuitive idea about the magnitude of the effect of the economy, we plot, in Figure 2, the predicted probabilities of voting for the regional incumbent.¹² Unemployment growth shows a negative slope: the probability of voting for the incumbent is 0.5 when unemployment decreases 2.5 percentage points (our sample minimum) and the probability drops to 0.38 when unemployment increases by 5 percentage points (sample maximum). In the case of GDP growth, the slope is positive and steeper than with unemployment. The probability ranges from 0.33 when GDP decreases 2.5 percentage points (sample minimum) to 0.55 when the economy grows 7 percentage points (sample maximum).

[FIGURE 2 ABOUT HERE]

In summary, the effect of the economy on Spanish regional elections suggests that the classic punish/reward model usually studied at the national level also operates at the regional one. However, the econometric models exhibited above overlook the significant power asymmetries between sub-national governments in Spain. As we argued in the introduction, multilevel institutional designs affect clarity of responsibility, which in turn may moderate the relationship between the economy and vote choice. More specifically, according to our first hypothesis, we expect regional economic voting to be higher in regions where decentralisation followed more closely a layer-cake model than in regions with a more marble-cake design.

In models A2 and B2 of Table 2, we test this hypothesis by interacting *decentralisation design* with our economic variables. We expect coefficients in the marble-cake model (mixed-track regions) to be lower than in the layer-cake group (fast- and slow-track regions). Unemployment and GDP growth coefficients in models A2 and B2 in Table 2 show the expected sign and they are statistically significant at $p < 0.05$ and $p < 0.01$ level respectively, which confirms the expected relationship between economic outcomes and the electoral support to the regional incumbent in fast-track regions (the base category). The interactions of models A2 and B2 show no statistically significant differences between fast- and slow-track regions. In both cases, economic outcomes exhibit a significant impact on the likelihood of voting for the incumbent party.¹³ Hence, our estimates suggest that voters in regions that followed a layer-cake model hold incumbents accountable for the evolution of the economy in their region.

As expected, we find significant differences between fast-track and mixed-track regions. Our estimates show that the economy is less relevant in mixed-track regions, although in the case of GDP growth the interaction term is only statistically different from zero at $p < 0.10$.

Figure 3 illustrates the moderating effect of the decentralisation path on economic voting. The left graph of the figure exhibits results for unemployment growth, showing that the slope is steeper in fast- and slow-track regions, whereas it is almost flat in mixed-track ones. This figure provides support to the argument that regional economic outputs have a stronger impact upon vote choices in regions where decentralisation followed a layer-cake design. For instance, the probability of voting for the incumbent party in fast-track regions is 0.5 when unemployment is reduced by 2.5 percentage points, but this probability decreases to 0.20 when unemployment grows by five points. Yet, in mixed-track regions (that follow a marble-cake design) the probability of voting for the incumbent is about 0.45 irrespectively of the evolution of the unemployment in the region. A similar pattern emerges in the right graph of Figure 3, which shows the effect of GDP growth upon regional incumbent support. Although the slope of mixed-track regions is not completely flat, confidence intervals indicate that most of the differences are not significantly different from zero. Some of these results are consistent with previous research that fails to find “genuine” regional economic voting in the mixed-track region of Catalonia (Orriols & Bosch, 2013; Bosh, 2016. According to Queralt (2012) the lack of economic voting in this region is explained by voters’ misinformation about the responsibilities of each level of government.

[FIGURE 3 ABOUT HERE]

Testing our second hypothesis provides a more nuanced account of the empirical findings for slow-track regions exhibited in Figure 3. Our argument is that citizens from slow-track regions will regard regional elections as a referendum of central government performance. This means that citizens do not evaluate the state of the regional economy as an indicator of the regional incumbent’s performance but assess it as the result of economic decisions taken at central level. Citizens’ evaluation of the central incumbent

will therefore spill over to electoral support of regional incumbents through partisan links, so we expect regional copartisans (that share party affiliation with the federal chief executive)¹⁴ to be punished for bad economic conditions and rewarded when good regional economic outputs are at stake. On the contrary, if our assumption is not correct and voters regard the regional administration as responsible for regional economic conditions, then we should expect economic downturns (upturns) to be negatively (positively) associated with support for the regional incumbent, regardless of the affiliated status of the regional executive.

In Table 3, we estimate the regression models only for the subsample of slow-track regions, interacting the *affiliated* and the economic variables. If our hypothesis is true, then we should find significant effects of unemployment and GDP growth upon the dependent variable only among affiliated regional governments. Results provide support for the hypothesis. While regional economic conditions have an impact upon incumbent support in affiliated executives, the effect disappears in regions with non-affiliated governments (see Figure 4). Hence, it seems that voters hold the central (and not the regional) government accountable for the economic outcomes of the region.

[TABLE 3 ABOUT HERE]

These empirical results are in line with previous empirical evidence that shows that regional elections in Spain are highly contaminated by national electoral results (León, 2014; Lago Peñas & Lago Peñas, 2011). Our paper helps to advance over this research by providing a more nuanced theoretical account of the institutional conditions under which the second-order nature of regional elections becomes more prominent. Our findings show that national coattails have a stronger effect where the central government has been the predominant level of government for a long period because

regional elections in these regions are regarded by citizens as an opportunity to evaluate central government's performance.

Finally, we carry out a robustness check of the second hypothesis and analyse whether national coattails may also be driving the empirical results of the mixed-track group.¹⁵ Results are exhibited in Table 3. If we focus on unemployment growth, we find that in the mixed-track group there is no economic voting in either affiliated or non-affiliated governments. Yet, GDP growth has a positive effect when the ruling party at the regional and national level is the same, whereas it exhibits no significant impact for non-affiliated regions. This finding indicates there is some second-orderness economic voting operating in mixed-track regions, although the effect is not as robust as in the slow-track group.

In sum, the exploration of regional economic voting in Spain confirms our expectations that economic voting will be higher in regions where the decentralisation design followed more closely to a layer-cake type. Further empirical analysis shows that economic voting in slow-track regions is fundamentally driven by the contamination from the national arena to the regional one, as stated in our second hypothesis. Voters in slow-track regions seem to use their vote in regional elections to evaluate central government's economic performance, as empirical evidence shows that regional copartisans of the central incumbent are rewarded for good economic conditions and punished when bad regional economic outputs are at stake.

All in all, empirical evidence indicates that asymmetric devolution in Spain is associated with an asymmetric operation of electoral accountability at the regional level. The impact of regional economic conditions upon regional incumbents' support varies according to each decentralisation path. Economic voting operates best in regions where

decentralisation follows a layer-cake model of devolution that enhances clarity of responsibility. On the contrary, in regions where the distribution of expenditures and revenue powers between levels of government has been more intertwined, clarity of responsibility is lower and regional economic voting is weaker.

Concluding remarks and future research paths

The literature on economic voting has come a long way in exploring the impact of the institutional context upon the relationship between economic outcomes and voting, but the vertical division of powers in multilevel systems and its impact upon clarity of responsibility and performance voting has lagged behind. This paper advances this literature gap by exploring the ways in which federalism may complicate responsibility attribution and weaken economic voting. The most important contribution of the paper is to show that although federal arrangements adopt a multiplicity of forms across and within federations, there are certain intergovernmental arrangements that might be better at enhancing clarity of responsibility and, in turn, at improving citizens' capacity to hold governments to account.

We arrive at that conclusion after analysing responsibility attribution and electoral accountability in an asymmetric federal state, the Spanish State of Autonomies.

Asymmetric devolution allows testing whether cross-regional differences in decentralisation arrangements are associated with different levels of clarity of responsibility and, in turn, with variation in electoral accountability. Using electoral surveys and aggregated economic data for the 1982-2012 period, the empirical analyses show that electoral accountability – operationalised as regional economic voting - is most pronounced in regions where decentralisation design concentrated authority and

resources at one level of government, whereas it is inexistent in regions where devolution followed a more intertwined model of power distribution.

One of the important implications of the paper is that although asymmetric devolution has been mainly praised for its properties to appease ethnic conflict, this may come at the price of significant cross-regional variation in how regional electoral accountability operates. This conclusion may be of particular relevance for informing the constitutional debate in countries that will be likely to face a constitutional reform of the territorial model in the near future, such as the United Kingdom. Our empirical results suggest that the specific way in which further devolution to Scotland as well as to England and Wales is designed, will be crucial in shaping electoral accountability in those regions after the reform.

Following upon previous lines, a potential development of the paper is to extend the analysis to other asymmetric states. There is evidence that the majority of decentralising reforms in the preceding sixty years have been asymmetric (Röth and Kaiser, 2014), but there is no theoretical nor empirical work that explores the impact of unequal design upon accountability. This paper lays the theoretical foundations to explore whether asymmetric devolution in states such as Canada, United Kingdom, Belgium or Italy has resulted in variation across-regions in the operation of economic voting within each country.

Second, this paper may also inspire further comparative research that explores institutional variation across federal realities and its potential impact upon responsibility attribution and performance voting. This could nicely follow upon recent developments in the area of comparative federalism, which has gradually abandoned the notion that federal and unitary states constitute uniform categories and has delved into the variation

in constitutional and non-constitutional institutions across federations (Beramendi and León, 2015). Our paper can help future researchers to have a better understanding of the relationship between the specific design of federal arrangements and its consequences upon responsibility attribution and electoral accountability.

Finally, future research could explore the relationship between regional economic voting and national economic voting. In this paper we have shown that variation across regions in decentralisation arrangements is associated with weaker or stronger economic voting in regional elections. Further analyses could explore whether that variation is correlated with differences in the way *national* economic voting operates. Is economic voting in national elections more pronounced where regional economic voting is weaker? Should we expect national elections to be driven by *regional* coattails where regional economic voting is stronger? Answering these questions would help clarify the extent to which the existence of *accountability gaps* at one level of government can be offset by stronger economic voting at the other.

¹ There are some remarkable differences across federations in the extent of overlapping jurisdictions that may be associated with variation in levels of clarity of responsibility. For instance, in Canada, Australia and the United States executive and legislative powers tend to coincide at one level of government, which results in lower coordination requirements in policy-making and higher clarity of responsibility. On the contrary, in Germany, Austria or Switzerland state and provincial governments hold executive authority over policy areas that are legislated at the federal level (Watts, 2008). This model involves a more intertwined distribution of executive and legislative authority that allows flexibility in policy-making, but probably at the cost of lower clarity of responsibilities.

² see Henderson's *decentralization index*

<http://www.econ.brown.edu/faculty/henderson/papers.html>; Watts 1996

³ See for instance Cutler (2004) for Canada, Rudolph (2003a) for the US, Johns (2011) for Ontario and Scotland or Hobolt and Tilley (2014a) for the EU.

⁴ Some scholars have included federalism as a dichotomous variable (federal-unitary) as one of the dimensions to measure institutional clarity of responsibility (Hobolt et al. 2013).

⁵ Data from IEF (Instituto de Estudios Fiscales) 2005-2010 cumulative survey.

⁶ In slow-track and mixed-track regions the income tax is shared between central government and regional governments whereas in fast-track regions governments have full autonomy over the income tax. Data comes from the IEF 2010 survey.

⁷ Most of the dropped level-two observations (ten out of the twelve) are missed due to the fact that the 1991 CIS surveys included in our database do not have the left-right

ideology variable. We do not expect this attrition to generate a systematic regional bias, since most regions lose one of their observations.

⁸ Recent surveys are freely available online at www.cis.es

⁹ This is also the dependent variable used in some previous literature on economic voting (i.e. Duch and Stevenson (2008) or Fortunato and Stevenson (2013)).

¹⁰ The formula is the following: $N = \frac{1}{\sum_{i=1}^n P_i^2}$ $N = \frac{1}{\sum_{i=1}^n P_i^2}$, where n is the number of parties competing in the elections with at least one vote and P_i is the vote share of each party

¹¹ We use the “Observatory Coalition Governments in Spain” dataset (University of Barcelona) to classify types of regional governments. Data reachable online at: www.ub.edu/OGC/index_es.htm

¹² The predicted probabilities are estimated keeping all remaining variables at their mean.

¹³ The coefficients of unemployment and GDP growth for slow-track regions are the sum of the main effect and the interactive term (-0.08 and 0.09 respectively) and both coefficients are statistically significant at $p < 0.05$ level.

¹⁴ Affiliated governments represent 63 per cent of the observations.

¹⁵ We do not study coattail effects in fast-track regions because they have never experienced an affiliated government during the period included in our database. Navarre had an affiliated government in 1983 (the Socialist Party was in charge of both the regional and the national government), but it is not included in our database since no electoral survey was available.

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Tables

Table 1. Classification of regions according to decentralisation path towards autonomy

	<i>Fast-track regions¹</i>	<i>Mixed-track regions²</i>	<i>Slow-track regions³</i>
<i>Expenditure powers</i>	High	High	Low
<i>Revenue powers</i>	High	Low	Low
	Layer-cake	Marble-cake	Layer-cake

¹Basque Country and Navarre

²Andalusia, Catalonia, Canary Islands, Comunidad Valenciana, Galicia.

³ Extremadura, Murcia, La Rioja, Cantabria, Asturias, Balearic Islands, Aragon, Castilla León, Castilla la Mancha and Madrid.

Table 2. The effect of unemployment and GDP growth on incumbency voting

	Unemployment Growth						GDP growth					
	Model A1			Model A2			Model B1			Model B2		
<u>Individual-level variables</u>	Coef.	S.E.	Sig.	Coef.	S.E.	Sig.	Coef.	S.E.	Sig.	Coef.	S.E.	Sig.
<u>Ideology</u>												
Centre-Left	0.66	(0.02)	**	0.66	(0.02)	**	0.66	(0.02)	**	0.66	(0.02)	**
Centre	0.81	(0.03)	**	0.81	(0.03)	**	0.81	(0.03)	**	0.81	(0.03)	**
Centre-right	1.15	(0.03)	**	1.16	(0.03)	**	1.16	(0.03)	**	1.16	(0.03)	**
Right	0.97	(0.03)	**	0.97	(0.03)	**	0.97	(0.03)	**	0.97	(0.03)	**
No ideology	0.83	(0.03)	**	0.83	(0.03)	**	0.83	(0.03)	**	0.83	(0.03)	**
<u>Education</u>												
Primary	-0.17	(0.02)	**	-0.17	(0.02)	**	-0.17	(0.02)	**	-0.17	(0.02)	**
Secondary	-0.44	(0.03)	**	-0.44	(0.03)	**	-0.44	(0.03)	**	-0.44	(0.03)	**
Vocational	-0.40	(0.03)	**	-0.39	(0.03)	**	-0.40	(0.03)	**	-0.39	(0.03)	**
University	-0.65	(0.03)	**	-0.65	(0.03)	**	-0.65	(0.03)	**	-0.65	(0.03)	**
Age	0.01	(0.00)	**	0.01	(0.00)	**	0.01	(0.00)	**	0.01	(0.00)	**
<u>Labour status</u>												
Retired	0.16	(0.02)	**	0.16	(0.02)	**	0.16	(0.02)	**	0.16	(0.02)	**
Unemployed	-0.02	(0.02)		-0.02	(0.02)		-0.02	(0.02)		-0.02	(0.02)	
Student	-0.13	(0.03)	**	-0.13	(0.03)	**	-0.13	(0.03)	**	-0.13	(0.03)	**
Housework	0.07	(0.02)	**	0.07	(0.02)	**	0.07	(0.02)	**	0.07	(0.02)	**
Sex (female)	0.01	(0.01)		0.01	(0.01)		0.01	(0.01)		0.01	(0.01)	
Political Knowledge	-0.09	(0.01)	**	-0.09	(0.01)	**	-0.09	(0.01)	**	-0.09	(0.01)	**
<u>Contextual-Level Variables</u>												
Affiliated	-0.05	(0.08)		-0.06	(0.08)		-0.08	(0.08)		-0.09	(0.08)	
<u>Coalition Government</u>												
Majority	-0.13	(0.12)		-0.12	(0.12)		-0.06	(0.12)		-0.06	(0.11)	
Minoritarian coalition	-0.32	(0.12)	**	-0.31	(0.12)	**	-0.32	(0.11)	**	-0.33	(0.11)	**
Majoritarian coalition	-0.15	(0.16)		-0.21	(0.15)		-0.15	(0.14)		-0.18	(0.14)	
Nº days since last General Election	0.00	(0.00)		0.00	(0.00)		0.00	(0.00)		0.00	(0.00)	
Number of effective Parties	-0.22	(0.07)	**	-0.22	(0.07)	**	-0.23	(0.06)	**	-0.23	(0.06)	**
<u>Type of region</u>												
Slow-track region	-0.19	(0.15)		-0.22	(0.15)		-0.19	(0.14)		0.01	(0.21)	
Mixed-Track region	-0.04	(0.14)		-0.12	(0.14)		-0.04	(0.13)		-0.26	(0.22)	
<i>Unemployment growth (Models A)</i>												
<i>/ GDP growth (Models B)</i>	-0.06	(0.02)	**	-0.19	(0.08)	*	0.10	(0.02)	**	0.19	(0.06)	**
<u>Interaction terms</u>												
Economy x Slow-track				0.11	(0.08)					-0.09	(0.06)	
Economy x Mixed-Track				0.17	(0.09)	*				-0.12	(0.07)	
Constant	0.29	(0.29)		0.36	(0.30)		0.02	(0.29)		-0.18	(0.24)	
/Insig2u	-1.98	(0.14)		-2.03	(0.14)		-2.10	(0.14)		-2.13	(0.14)	
sigma_u	0.37	(0.03)		0.36	(0.03)		0.35	(0.03)		0.34	(0.02)	
rho	0.04	(0.01)		0.04	(0.01)		0.04	(0.01)		0.03	(0.00)	
Number of observations							119688					
Number of groups							109					

Multilevel logistic regression maximum likelihood estimates. ‘ significant at $p < 0.1$ * significant at $p < 0.05$ ** significant at $p < 0.01$.

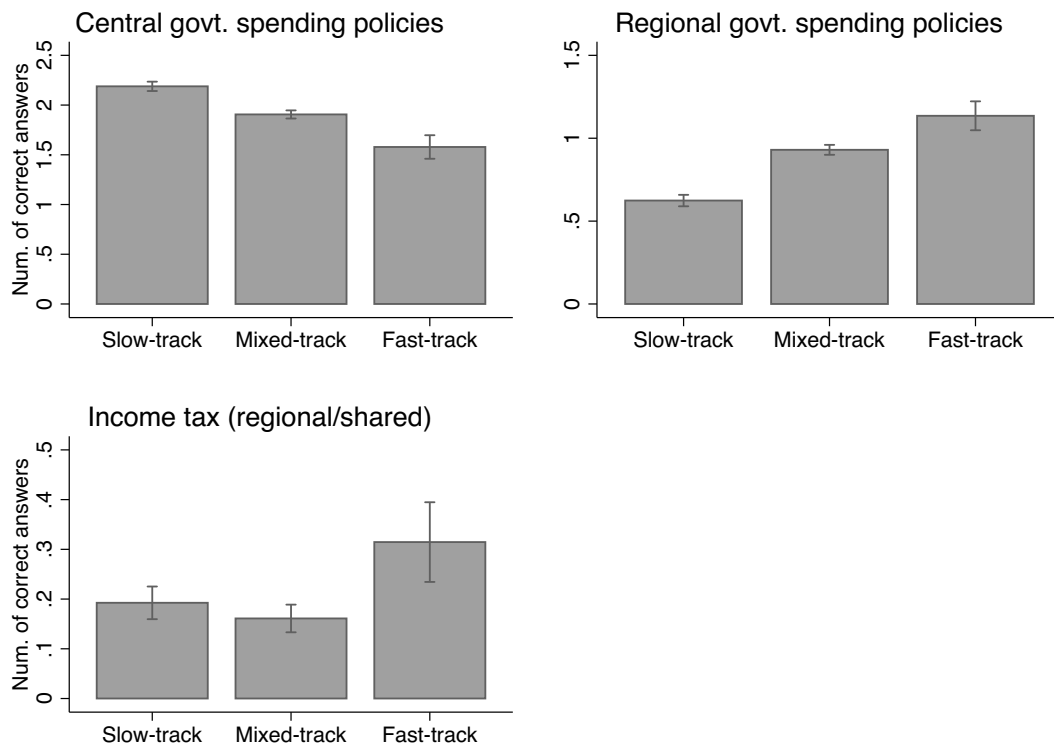
Table 3. Economic voting in slow and mixed-track regions. The effect of national coattails.

	Slow track regions						Mixed-track regions					
	Unemployment			GDP			Unemployment			GDP		
	Model C1		Model D1	Model C2		Model D2	Model C2		Model D2	Model C2		Model D2
	Coef.	S.E.	Sig.	Coef.	S.E.	Sig.	Coef.	S.E.	Sig.	Coef.	S.E.	Sig.
Coalition Government												
Majority	0.20	(0.17)		0.33	(0.15)	*	-0.13	(0.22)		-0.06	(0.21)	
Minoritarian coalition	-0.04	(0.20)		-0.08	(0.17)		-0.45	(0.15)	**	-0.34	(0.15)	*
Majoritarian coalition	0.00	(0.17)		-0.02	(0.25)		-0.29	(0.21)		-0.13	(0.20)	
Nº days since last General Election	0.00	(0.00)		0.00	(0.00)		-0.00	(0.00)	**	-0.00	(0.00)	*
Number of effective Parties	-0.54	(0.15)	**	-0.51	(0.13)	**	-0.08	(0.09)		-0.12	(0.08)	
Non-affiliated (base category: affiliated)	-0.03	(0.11)		0.42	(0.15)	**	-0.14	(0.13)		-0.41	(0.21)	*
Economy. <i>Unemployment growth (Models C) / GDP growth (Models D)</i>												
<i>Economy x Non-affiliated</i>	0.09	(0.06)		-0.12	(0.05)	**	-0.01	(0.07)		-0.12	(0.07)	'
Constant	1.41	(0.50)	**	0.64	(0.48)		-0.37	(0.26)		-0.70	(0.26)	
/Insig2u	-2.07	(0.19)		-2.28	(0.20)		-2.38	(0.25)		-2.63	(0.25)	
sigma_u	0.36	(0.03)		0.32	(0.03)		0.30	(0.04)		0.27	(0.03)	
rho	0.04	(0.01)		0.03	(0.01)		0.03	(0.01)		0.02	(0.01)	
Number of observations					50508						55210	
Number of groups					59						35	

Note: The table only includes the contextual-level variables since the estimates of the individual level ones do not substantially change from the ones reported in Table 2

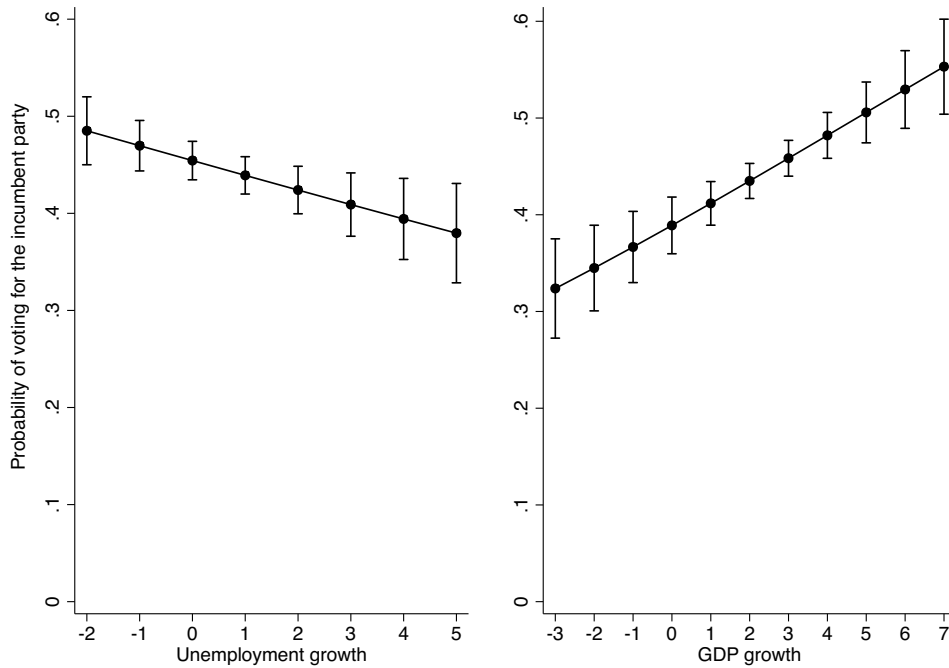
Figures

Figure 1. Clarity of responsibility of central and regional government powers, by the type of region.



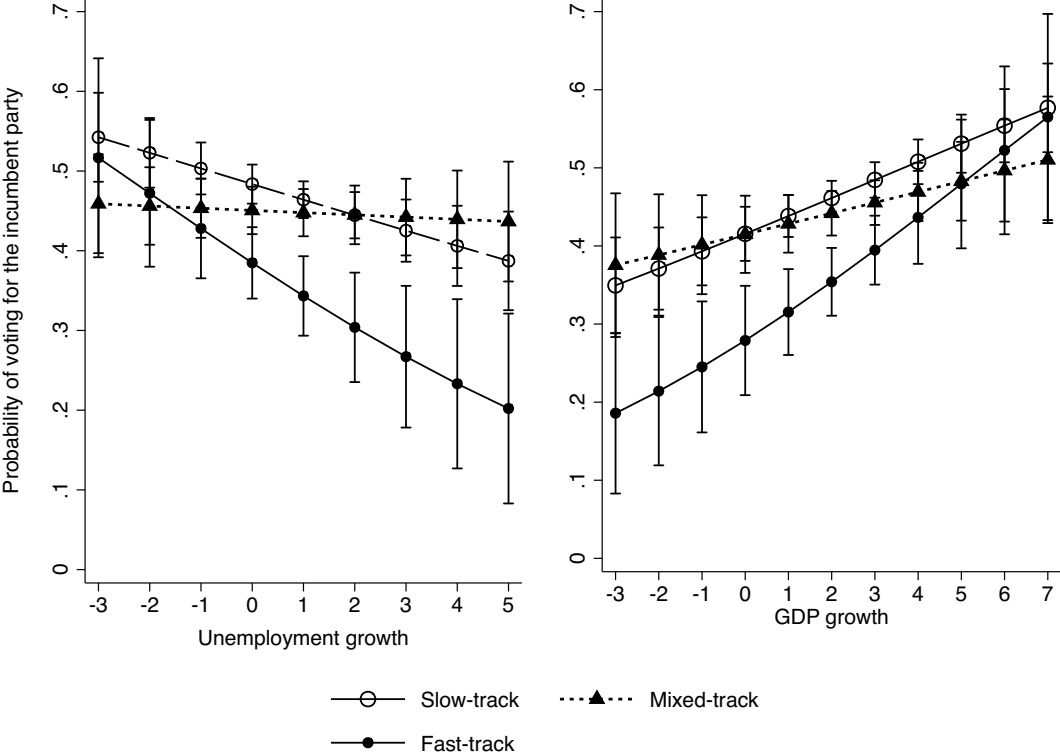
Source: IEF cumulative survey 2005-2010 for spending policies (healthcare, education, old-age pensions, illness/disability benefits and unemployment benefits) and IEF 2010 survey for income tax. In fast track regions income tax belongs to the regional level and in mixed- and slow-track regions it is shared between regional and central government.

Figure 2. The economic vote in the Spanish regional elections: the effect of unemployment and the GDP growth.



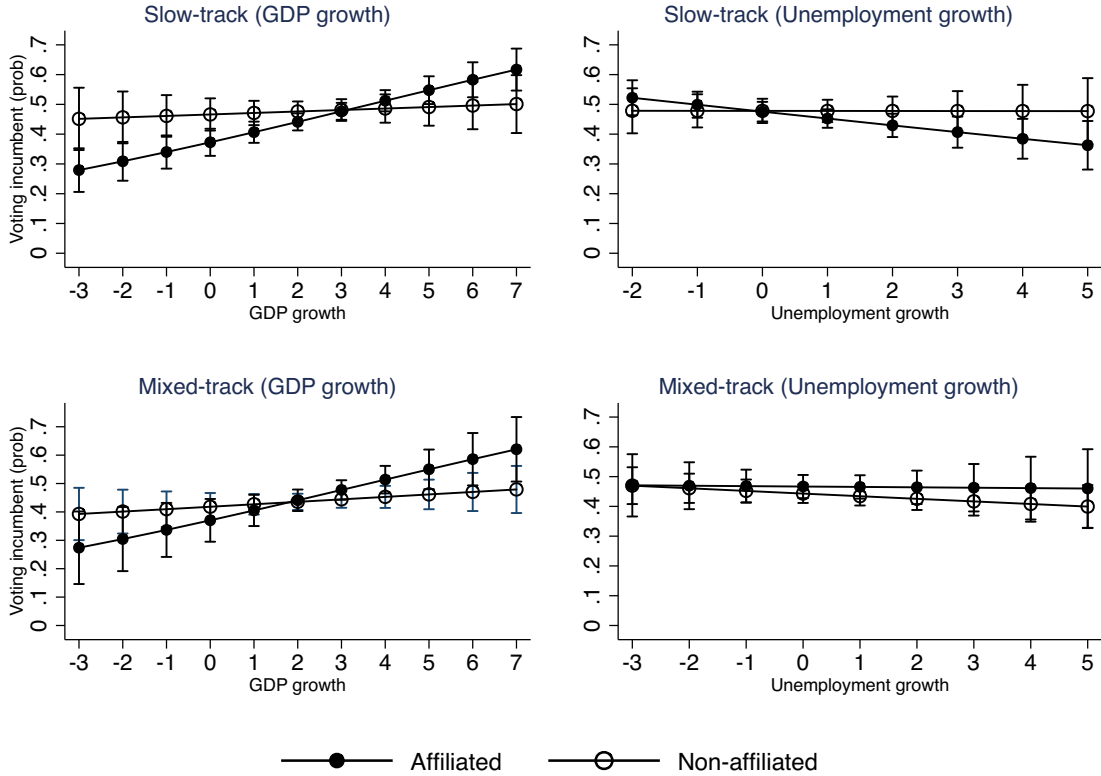
Note: predicted probabilities using models A1 and B1 of Table 2. All remaining variables are kept in their means.

Figure 3. The effect of the unemployment and the GDP growth in incumbency vote, by different type of regions.



Note: predicted probabilities using models A2 and B2 of Table 2. All remaining variables are kept in their means.

Figure 4. The effect of the unemployment and the GDP growth in incumbency vote, by region government affiliation.



Note: predicted probabilities using models of Table 3. All remaining variables are kept in their means.